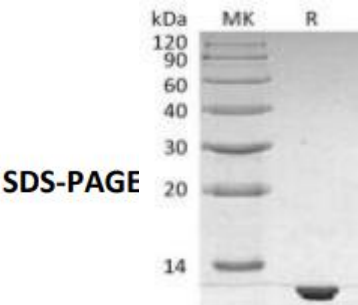


Recombinant Human S100B

Catalog#:P00663 Derived from *E.coli*

DESCRIPTION	<p>Recombinant Human S100 Calcium Binding Protein B is produced by our <i>E.coli</i> expression system and the target gene encoding Met1-Glu92 is expressed with a 6His tag at the N-terminus.</p> <p>Accession#: P04271</p> <p>Known as: Protein S100-B; S-100 protein beta chain; S-100 protein subunit beta; S100 calcium-binding protein B; S100b; S100 beta; S100 calcium binding protein B</p>
FORMULATION	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
SHIPPING	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
STORAGE	<p>Lyophilized protein should be stored at <-20°C, though stable at room temperature for 3 weeks.</p> <p>Reconstituted protein solution can be stored at 4-7°C for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at < -20°C for 3 months.</p>
RECONSTITUTION	<p><i>Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml.</i></p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
QUALITY CONTROL	<p>Mol Mass: 12.2kDa AP Mol Mass: 12kDa, reducing conditions.</p> <p>Purity: Greater than 95% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: Less than 0.1 ng/µg (1 EU/µg) as determined by LAL test.</p>
BACKGROUND	<p>S100-B, is an acidic protein with a molecular weight of 21 kDa belonging to the S100 family. S100-B contains two EF-hand-type calcium-binding motifs separated by a hinge region with a hydrophobic cleft. S100-B plays an important role in neurodevelopment, differentiation, and brain construction. S100-B has neuroprotective effects, but at high concentrations S100-B is neurotoxic. Extracellular concentration of S100-B increases following brain damage, which easily penetrates into cerebrospinal fluid in brain damage and then into the blood. S100-B is expressed and produced by astrocytes in vertebrate brains and in the CNS, and the astrocytes are the major cells producing S100-B protein in gray matter, as well as oligodendrocytes are the predominant S100-B in protein producing cells in white matter. The major advantage of using S100-B is that elevations in serum or CSF levels provide a sensitive measure for determining CNS injury at the molecular level before gross changes develop, enabling timely delivery of crucial medical intervention before irreversible damage occurs. In addition, S100-B, which is also present in human melanocytes, is a reliable marker for melanoma malignancy both in bioptic tissue and in serum.</p>
 <p>SDS-PAGE</p>	